

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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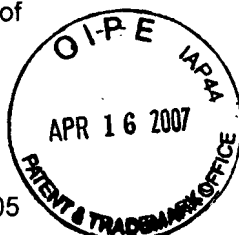
In re Patent Application of

Atty BJS-3665-131
Dkt.

NALIN et al.

Serial No. 10/522,037

Filed: January 24, 2005

Title: METHOD FOR THE EXPRESSION OF UNKNOWN ENVIRONMENTAL DNA INTO
ADAPTED HOST CELLS

C/A.U.

C# M#

1637

Examiner: Kim

Date: April 16, 2007

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

RESPONSE/AMENDMENT/LETTER

This is a response/amendment/letter in the above-identified application and includes an attachment which is hereby incorporated by reference and the signature below serves as the signature to the attachment in the absence of any other signature thereon.

☐ **Correspondence Address Indication Form Attached.****Fees are attached as calculated below:**

Total effective claims after amendment 0 minus highest number
previously paid for 20 (at least 20) = 0 x \$50.00 \$0.00 (1202)/\$0.00 (2202) \$

Independent claims after amendment 0 minus highest number
previously paid for 3 (at least 3) = 0 x \$200.00 \$0.00 (1201)/\$0.00 (2201) \$

If proper multiple dependent claims now added for first time, (ignore improper); add
\$360.00 (1203)/\$0.00 (2203) \$

Petition is hereby made to extend the current due date so as to cover the filing date of this
paper and attachment(s)
One Month Extension \$120.00 (1251)/\$0.00 (2251)
Two Month Extensions \$450.00 (1252)/\$0.00 (2252)
Three Month Extensions \$1020.00 (1253)/\$0.00 (2253)
Four Month Extensions \$1590.00 (1254)/\$0.00 (2254)
Five Month Extensions \$2160.00 (1255)/\$1080.00 (2255) \$

Terminal disclaimer enclosed, add \$130.00 (1814)/ \$0.00 (2814) \$

☐ Applicant claims "small entity" status. ☐ Statement filed herewith

Rule 56 Information Disclosure Statement Filing Fee \$180.00 (1806) \$ 0.00

Assignment Recording Fee \$40.00 (8021) \$ 0.00

Other: \$ 0.00

TOTAL FEE \$ 0.00☐ **CREDIT CARD PAYMENT FORM ATTACHED.**

The Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Account No. 14-1140. A duplicate copy of this sheet is attached.

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By Atty: B. J. Sadoff, Reg. No. 36,663

Signature: 



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

NALIN et al.

Atty. Ref.: 3665-131; Confirmation No. 6742

Appl. No. 10/522,037

TC/A.U. 1637

Filed: January 24, 2005

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For: METHOD FOR THE EXPRESSION OF UNKNOWN ENVIRONMENTAL DNA INTO
ADAPTED HOST CELLS

* * * * *

April 16, 2007

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

RESPONSE

Responsive to the Official Action dated March 22, 2007, the applicants elect, with traverse, the subject matter of the Examiner's Group I for further prosecution in the above.

Reconsideration and withdrawal of the lack of unity assertion, and examination of all of the claimed subject matter, are requested in view of the following comments.

The subject matter of at least the Examiner's Groups I-IV are linked by a single general inventive concept. The Examiner is requested to see the attached determination of the same during the International phase of the PCT. See attached page from International Search Report. Originally-filed claims 1-18 correspond to the subject matter of the Examiner's Group I, originally-filed claim 19 corresponds to the subject

matter of the Examiner's Group II, originally-filed claim 20 corresponds to the subject matter of the Examiner's Group III, originally-filed claim 21 corresponds to the subject matter of the Examiner's Group IV, originally-filed claim 22 corresponds to the subject matter of the Examiner's Group V, and originally-filed claim 23 corresponds to the subject matter of the Examiner's Group VI.

The single general inventive concept is the modification of a target vector with a construct in order to be integrated into the genome of the host cell.

Specifically, in the claims indicated as being described by the Examiner's Group I, the step (ii) of claims 24 consists in this modification and involves the single general inventive concept.

In claim 42, indicated as being described by the Examiner's Group II, the step (iii) consists in this modification and involves the single general inventive concept.

In claim 43, indicated as being described by the Examiner's Group III, the construct used for modifying the target vector is recited and therefore the claim requires the single general inventive concept.

In claim 44, indicated as being described by the Examiner's Group IV, the claimed library comprises vectors that have been modified by the construct in order to be suitable for being integrated into the host cell genome. Therefore, it involves the single general inventive concept.

This single general inventive concept is novel and non-obvious for the following reasons.

The construct comprises an origin of transfer and elements for integration and selection in the selected host cell flanked by two inverted repeats. The two inverted

repeats allow the insertion of the construct into the selected cloning vector, thereby carrying out the vector modification (see claim 38; page 5, lines 20-22). The origin of transfer allows the vector to be transferred into the desired host cell (page 14, lines 30-31) and the elements for integration allow the integration of the target polynucleotide into the genome of the host cell. (see page 5, lines 24-25, page 16, lines 7-16)

O'Brochta et al (U.S. Patent No. 5,614,398) do not disclose or suggest such a construct. This document only describes the two inverted repeats and their use for recombining heterologous DNA. It does not disclose nor suggest a twin system of integration: a first one for introduction into the vector (transposons) and a second one for integration into the host cell genome (e.g., integrase system). Therefore, the construct is novel and non-obvious.

At a minimum, the subject matter of the Examiner's Groups I, II, III and IV fulfil the requirement of a single combination, namely a process and means to carryout the process. The subject matter of the Examiner Groups I and II concern the process and the subject matter of the Examiner's Groups III and IV concern means. The subject matter of the Examiner's Group III is the construct used to modify the vectors. The subject matter of the Examiner's Group IV is the library useful in a process according claim 24 or 42 and resulting from steps (i)-(ii) of claim 24 and steps (i)-(iii) of claim 42.


Reconsideration and withdrawal of the restriction requirement and lack of unity determination are requested along with an early and favourable Action on the merits of the claimed invention.

NALIN et al.
Appl. No. 10/522,037
April 16, 2007

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: _____


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FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-21

Method of analysing a library of polynucleotides comprising the selection of cloning vectors, modification of these vectors and analysis the polynucleotides contained in vectors upon transfer in host cell.

2. Claims: 22-23

Polynucleotide sequence comprising all or part of SEQ ID NO:1 or 2. An oligonucleotide comprising SEQ ID NO:3 or 4.